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**For Immediate Release**  
October 20, 2008

## **U.S. Department of Energy Launches Real World Design Challenge**

*Goal of New Competition Is to Inspire High School Students to Study Engineering*

**WASHINGTON, DC** – The U.S. Department of Energy (DOE) has launched the Real World Design Challenge (RWDC), a new annual competition that provides high school students with the opportunity to work on real world engineering challenges in a collaborative environment. The purpose of the RWDC is to ensure the future of our Nation's economic competitiveness and national security by inspiring today's students to become tomorrow's engineers.

“The Real World Design Challenge is intended to engage high school students with real engineering problems faced by industry,” said Bill Valdez, Director of the Office of Workforce Development for Teachers and Scientists in DOE's Office of Science. “The Department of Energy shares a concern with industry that not enough U.S. students are studying science and engineering. The genuine participation in the ‘innovation economy’ made possible by the RWDC will encourage more students to choose scientific and engineering career paths.”

The RWDC is a unique contest that challenges students to apply the lessons of the classroom to the technical problems currently faced in the engineering field. The theme for the 2009 Challenge is “Aviation and Fuel Consumption.” Student teams will be asked to redesign an existing aircraft to improve its fuel efficiency without drastically reducing its performance capabilities. Students will use professional engineering software to develop their solutions.

The RWDC will take place first at the state level and then at the national level. Participation in the competition is open to high-school age students, grades 9 – 12, residing in or attending school in one of the 10 states participating in this inaugural year: Connecticut, Hawaii, Kansas, Massachusetts, Minnesota, Oklahoma, Pennsylvania, Vermont, Virginia and Washington. Teams must register by November 15 and will have until February 2 to submit their design solutions at the state level challenge. Sixty five teams have registered to date. Each state will select its top team to represent the state at the RWDC national competition to be held March 2009 in Washington, DC. DOE will provide the 10 winning teams with expense-paid trips to the national competition, subject to annual appropriations.

The National Challenge, to be issued on February 22, will add several components to the original aviation design challenge. Teams competing in the National Challenge will also be asked to develop a “marketing” presentation explaining how and why they arrived at their proposed solution. Presentations will be made before an expert panel representing

professionals from industry, academia and the federal government. Winners will be chosen based on the teams' design solutions, presentations and project journals.

The teams' teachers will be trained in the use of the computer aided design (CAD) engineering software and will receive classroom software licenses. Teams may include up to seven students and will be organized in real industry roles, such as project manager, scientist, engineer and community relations and marketing. During the competition, students will use a professional web-based collaboration tool to call upon volunteer mentors from DOE national laboratories, universities and industry for scientific and engineering advice.

The RWDC reflects DOE's recognition that nurturing student interest in technology and engineering is as important as nurturing interest in science and mathematics. The goal of the RWDC is to inspire students to study engineering in much the same way the DOE's National Science Bowl® inspires thousands of students to study science. DOE's Office of Workforce Development for Teachers and Scientists manages both the National Science Bowl® and the RWDC.

DOE plans to expand the competition to additional states in the future. Each year the student teams will address a different engineering challenge.

Learn more about the [Real World Design Governor's Challenge](#).

**U.S. Department of Energy, Office of Public Affairs, Washington, D.C.**